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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/673,518	12/06/2000	Masayuki Takahashi	2000-1416A	7609

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EXAMINER

LEROUX, ETIENNE PIERRE

ART UNIT	PAPER NUMBER
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2171

DATE MAILED: 04/02/2004

12

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/673,518

Applicant(s)

TAKAHASHI, MASAYUKI

Examiner

Etienne P LeRoux

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 8.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 16, 17, 19-21 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by US Pat No. 5,675,769 issued to Ruff et al (hereafter Ruff).

Claim 16:

Ruff discloses a digital data recording/reproduction method for recording and reproducing digital data in units of clusters, which are each the smallest unit of data recording on a disk recording medium, said method comprising:

- constructing a file structure on the disk recording medium in which recordable clusters are connected in advance of starting data recording [data is removed from disk before altering partition table, col 4, lines 16-35];
- recording digital data from the head of the recordable clusters [data copied to disk, col 4, lines 40-44]
- constituting, as a recorded file, the digital data from a recording head cluster to a recording end cluster [system indicator 50 identifies file, col 3, lines 17-35].

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Claim 17:

Ruff discloses detecting, when an abend occurs during said recording digital data from the head of the recordable clusters, the abend of data recording after recovery from the abend; and constituting, as a recorded file, the digital data which has been recorded from the start of data recording to the abend on the basis of format information of the digital data [col 8, lines 34-53].

Claims 19 and 23:

Ruff discloses wherein the format information of the digital data is time information [col 5, lines 60-65]

Claim 20:

Ruff discloses:

- a disk recording medium operable to store digital data in units of clusters, each cluster being the smallest unit of data recording; and
- a file structure management unit operable to store the digital data in said disk recording medium, read the digital data from said disk recording medium, construct a file structure in which recordable clusters are connected in advance of starting data recording, record the digital data from the head of the recordable clusters when data recording is started, and constitute, as a recording file, the digital data from the recording head cluster to the recording end cluster when the data recording is ended [data is removed from disk before altering partition table, col 4, lines 16-35, data copied to disk, col 4, lines 40-44, system indicator 50 identifies file, col 3, lines 17-35].

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Claim 21:

Ruff discloses wherein said file structure management unit comprises a file recovery unit, and when an abend occurs during recording of the digital data, said file recovery unit is operable to constitute, as recorded data, the digital data which has been recorded from the start of data recording to the abend on the basis of format information of the digital data after recovery from the abend [col 8, lines 34-53].

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 18 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ruff in view of US Pat No. 4,103,338 issued to Cizmic et al (hereafter Cizmic)

Claims 18 and 22:

Ruff discloses the elements of claims 16 and 20 as noted above.

Ruff fails to disclose wherein the format information of the digital data is a sync byte of a transport packet.

Cizmic discloses wherein the format information of the digital data is a sync byte of a transport packet [Fig 21]

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ruff to include wherein the format information of the digital data is a sync byte of a transport packet as taught by Cizmic.

The ordinarily skilled artisan would have been motivated to modify Ruff as above for the purpose of providing a point of reference for the synchronizing of two or more operations.

5. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ruff in view of US Pat No. 6,119,109 issued to Muratani et al (hereafter Muratani).

Claim 24:

Ruff discloses the elements of claim 20 and 21 as noted above.

Ruff fails to disclose a digital broadcast receiver for receiving a digital broadcast a controller for controlling the file structure management unit, according to accounting information which indicates whether the received digital broadcast is a fee-charged one or not, wherein, when an abend of data recording occurs during reception of a fee-charged digital broadcast, the controller discards the recorded data after recovery from the abend so that accounting is not performed on the digital broadcast.

Muratani discloses a digital broadcast receiver for receiving a digital broadcast a controller for controlling the file structure management unit, according to accounting information which indicates whether the received digital broadcast is a fee-charged one or not, wherein, when an abend of data recording occurs during reception of a fee-charged digital broadcast, the controller discards the recorded data after recovery from the abend so that accounting is not performed on the digital broadcast [col 16, lines 1-5].

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ruff to include a digital broadcast receiver for receiving a digital broadcast a controller for controlling the file structure management unit, according to accounting information which indicates whether the received digital broadcast is a fee-charged one or not, wherein, when an abend of data recording occurs during reception of a fee-charged digital broadcast, the controller discards the recorded data after recovery from the abend so that accounting is not performed on the digital broadcast as taught by Muratani.

The ordinarily skilled artisan would have been motivated to modify Ruff '769 as above for the purpose of improving the invention by providing a customer with an accurate bill for services received by the customer.

6. Claims 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Ruff and Cizmic and further in view of Muratani.

Claims 25 and 26:

The combination of Ruff and Cizmic disclose the elements of claims 22 and 23 as noted above.

The combination of Ruff and Cizmic fails to disclose a digital broadcast receiver for receiving a digital broadcast signal and a controller for controlling the file structure management unit, according to accounting information which indicates whether the received digital broadcast is a fee-charged one or not, wherein when an abend of data recording occurs during reception of

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a fee-charged digital signal broadcast, the controller discards the recorded data after recovery from the abend so that accounting is not performed on the digital broadcast

Muratani discloses a digital broadcast receiver for receiving a digital broadcast signal and a controller for controlling the file structure management unit, according to accounting information which indicates whether the received digital broadcast is a fee-charged one or not, wherein when an abend of data recording occurs during reception of a fee-charged digital signal broadcast, the controller discards the recorded data after recovery from the abend so that accounting is not performed on the digital broadcast [col 16, lines 1-5]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Ruff and Cizmic to include a digital broadcast receiver for receiving a digital broadcast signal and a controller for controlling the file structure management unit, according to accounting information which indicates whether the received digital broadcast is a fee-charged one or not, wherein when an abend of data recording occurs during reception of a fee-charged digital signal broadcast, the controller discards the recorded data after recovery from the abend so that accounting is not performed on the digital broadcast as taught by Muratani.

The ordinarily skilled artisan would have been motivated to modify the combination of Ruff and Cizmic as above for the purpose of improving the invention by providing a customer with an accurate bill for services received by the customer.

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Response to Arguments

Applicant's arguments filed 2/9/2004 have been fully considered but they are not persuasive.

First Applicant Argument:

On pages 6-9 applicant argues that Ruff does not disclose or suggest "utilizing a file structure management unit which is operable to construct a file structure in which recordable clusters are connected in advance of starting data recording as recited in new claim 20."

First Examiner Response:

Examiner is not persuaded. Ruff discloses the following in column 24, lines 5-24:

During a moving step 200, the data cluster regions identified during the identifying step 198 are cleared by moving the data to a safe location on the disk 10. The conventional method of moving clusters on a partition, which is employed by disk defragmentation and data recovery utilities, may be employed while repeating the following steps for each cluster that must be moved: Identify a cluster from the region which must be moved. Find a free cluster within the modified partition's data cluster area. Copy the data from the identified cluster to the free cluster. Mark the free cluster as used and update the file allocation table(s) on the disk 10. Adjust all references to the old cluster location to indicate the new location of the data. Such references may occur in the file allocation table(s) and/or in directory entries. The updating of directory back and self pointers may be performed at this time, or such updating may be postponed until a subsequent partition integrity verifying or reverifying step. Next, save the updated structures on the disk 10 (FIG. 1). Finally, mark the old cluster as free (or with the value of one to reserve it), and then save the file allocation table(s) to the disk 10 once again.

Examiner maintains above disclosure by Ruff, and in particular the bolded text, reads on the claim 16 limitation "constructing a file structure on the disk recoding medium in which recordable clusters are connected in advance of starting data recording."

Second Applicant Argument:

In the third paragraph on page 9, applicant states "Furthermore, the applicant respectfully submits that neither Cizmic et al nor Muratani et al either individually or in combination, cure the deficiencies of Ruff et al of failing to disclose or suggest constructing a file structure in which recordable clusters are connected in advance of starting data recording as recited in new claims 16 and 20."

Second Examiner Response:

Examiner is not persuaded. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Etienne LeRoux whose telephone number is (703) 305-0620.

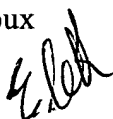
The examiner can normally be reached on Monday – Friday from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic, can be reached on (703) 308-1436.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Etienne LeRoux

4/1/2004



SAFET METJAHIC
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100